DRILL HOLES

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BORDER REV: DATE: June 1, 2004

PROJECT DESCRIPTION

I. GENERAL

This project involves the installation of a temporary Traffic Control Signal with interconnect street lighting at the intersection of MD 355 (Frederick Rd) and Stringtown Rd in Montgomery County. This signal shall remain in operation until Stringtown Rd is realigned and the permanent mast arm signal is installed. 12-pair interconnect cable shall be installed on the existing Alleghany Power poles on the west side of MD 355 by lashing it to the existing county fiber optic cable. MD 355 (Frederick Rd) is assumed to run a north-south direction. Video detection shall be used for Stringtown Rd.

II. INTERSECTION OPERATION

1. The intersection is to operate in a NEMA three-phase, semi-actuated mode, with the MD 355 (Frederick Rd) approaches running concurrently. The Stringtown Rd approach shall run in its own phase.

2. A full-traffic-actuated, eight-phase controller with one (1) four channel, rack mount loop detector amplifiers, video interface L.A.U. and L.A.U. Panel housed in a NEMA size "5" pole-mounted cabinet shall be installed at this intersection.

III. SPECIAL NOTES

1. The Contractor shall be responsible for terminating all signal cables, to the appropriate terminals and shall properly label each cable.

2. All controller cabinet wiring will be performed by Montgomery County Forces. Contact Dr. Wilhelm DerMinassian at (240) 777-8795 seventy-two hours in advance of intended work.

3. All underground and overhead utilities shown on these plans are schematic only and may not be complete. The Contractor shall be responsible for notifying Miss Utility prior to construction so that all utilities may be located in the field. If the Contractor perceives that a conflict between the utilities and the traffic signal will occur, the Contractor shall notify the Project Engineer immediately so that the conflict may be resolved.

EQUIPMENT LIST

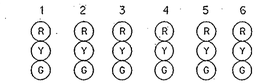
A. EQUIPMENT TO BE SUPPLIED BY MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION AND INSTALLED BY THE CONTRACTOR

ITEM NO.	DESCRIPTION	QUANTITY
8088	W3-3 NEW "SIGNAL AHEAD" sign. (36" x 36") ground mounted with hardware.	2 Each

B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

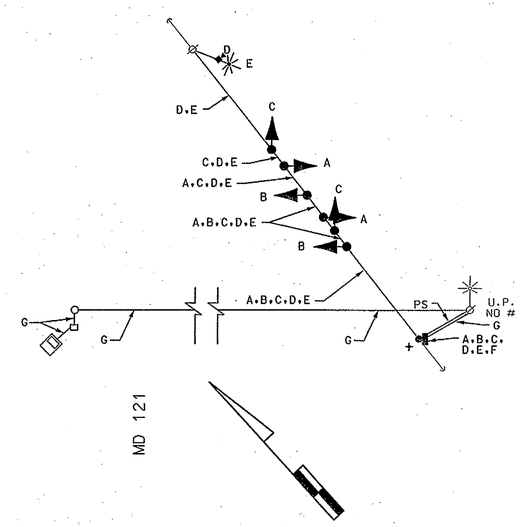
ITEM NO.	DESCRIPTION	QUANTITY
1001	Maintenance of Traffic	1 Day
2002	Test pit excavation.	2 C.Y.
7002	Selective Tree Trimming.	1 EA
8041	Control and distribution equipment.	1 Each
8043	Ground rod, 3/4" diameter x 10' length with clamp.	1 Each
8049	12-Pair telemetry cable, jelly filled, self -supporting (overhead).	1700 L.F.
8063	Canoga 4-conductor electrical cable (No. 14 A.W.G.) (shielded).	145 L.F.
8066	5-conductor electrical cable (No. 14 A.W.G.).	320 L.F.
8070	2-conductor electrical cable (No. 12 A.W.G.) copper type TC.	145 L.F.
8075	1-conductor electrical cable (No. 6 A.W.G.) stranded bare copper ground wire.	20 L.F.
8082	Wood sign supports (4" x 6").	32 L.F.
8092	10' lighting arm.	1 Each
8097	250W-HPS luminaire.	1 Each
8101	Wood pole - Class II (40').	2 Each
8109	3" weatherhead.	1 Each
8113	3/8" steel span wire.	110 L.F.
8114	1/4" steel tether wire.	110 L.F.
8119	Back guy.	2 Each
Neg.	Remove existing pavement markings.	125 L.F.
Neg.	24" white heat applied permanent preformed thermoplastic pavement marking.	60 L.F.
Neg.	3" polyvinyl chloride electrical conduit (Schedule 80) (riser).	30 L.F.
	Furnish and install 12" vehicular LED traffic signal head (R,Y,G)	6 Each
Neg.	Eight-phase, full-traffic-actuated, solid state digital controller with L.A.U. and L.A.U. Panel (1) 4-channel rack, video interface and all necessary equipment housed in a NEMA size "5" pole-mounted cabinet.	1 Each

PHASE CHART



PHASE 2 & 6	G	G	G	G	R	R	
2 & 6 CHANGE	Y	Y	Y	Y	R	R	
PHASE 4	R	R	R	R	G	G	
4 CHANGE	R	R	R	R	Y	Y	
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	

WIRING DIAGRAM



WIRING KEY

A, B, C } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G)

D - 4-CONDUCTOR CANOGA CABLE (NO. 14 A.W.G) SHIELDED

E - 2-CONDUCTOR TRAY CABLE (NO. 12 A.W.G)

F - STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)

G - OVERHEAD 12- PAIR TELEMETRY CABLE (LASH TO THE EXISTING COUNTY FIBER OPTIC CABLE).

PS - PROPOSED OVERHEAD SERVICE TO BE INSTALLED BY ALLEGHANY POWER

+ - GROUND ROD

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

MD 355 (FREDERICK ROAD) AND SPRINGTOWN ROAD

TEMPORARY SIGNAL FOR M.O.T.

STREET TRAFFIC STUDIES, LTD.
400 Crain Hwy.NW.
Glen Burnie,MD 21061
Ph (410) 590-5500
Fax (410) 590-6637

4943.dgn

PLOTTED: $DATETIME$
FILE: $FILE$

SCALE NONE	DATE 9-21-05	CONTRACT NO.	
DESIGNED BY R R ZACHERL		COUNTY MONTGOMERY	
DRAWN BY ROB CICCHINI		LOGMILE 15035522.64	
CHECKED BY		TIMS NO.	
F.A.P. NO.		TOD NO.	
TS NO.4325TEMP	DRAWING NO. OF	SHEET NO. 2 OF 2	

08 30 2005 13:30 MDSHA\MDSHA\DGN